

Virginia Western Community College
WEL 195
Topics in Welding- Fit Up & Fabrication

Prerequisites

NONE

Course Description

Introduces student to project layout from shop sketches/blueprints, developing templates/patterns and the use of fabrication tools. Covers the safe operation of different types of manual metal fabrication equipment used in the industry. Examines safe and efficient use of the metal shear, iron worker and other fabrication.

Semester Credits: 2 Lecture Hours: # 1 Lab Hours: # 3

Required Materials**Textbook:**

Welding Print Reading, 8th Edition, ISBN #: 9781685845728

Modern Welding, 13th Edition, ISBN #: 9781685845711

Other Required Materials:

Welding Kit to include: Uncorded ear plugs, Auto darkening helmet, Headgear face shield Jackson, Clear visor Jackson, Shade 5.0 visor Jackson, MIG gloves, TIG gloves, Safety glasses

Course Outcomes

At the completion of this course, the student should be able to:

- Use blueprints and shop drawings to layout projects
- Operate manual metal fabricating equipment
- Complete assigned fabricated projects

Topical Description

1. Review of blueprint reading
2. Templates and Patterns
3. Operating metal shear
4. Operating iron worker
5. Jig tables, clamps and other assembly tools
6. Importance of plumb and square
7. Correct measuring procedures